Claim Amendments

Please amend claims 1, 6, 8, and 11, and add new claims 19 - 22 as follows.

1. (currently amended) A stereoscopic microscope, comprising:

a light source section;

an observation optical system that includes an objective lens, left and right zooming optical systems for changing the magnification of the observation optical system, and left and right eyepiece optical systems;

an illumination optical system having an optical axis and including a projection optical system that forms a single image within the ~~projection~~ illumination optical system ~~and which irradiates~~, said illumination optical system irradiating a light flux from the light source section onto an observation object ~~via the projection optical system~~ without passing illumination light through the objective lens;

~~an observation optical system that includes an objective lens, left and right zooming optical systems for changing the magnification of the observation optical system, and left and right eyepiece optical systems~~;

wherein

a center position of said light source section is de-centered from the optical axis of the ~~illumination~~ projection optical system.

2. (original) A stereoscopic microscope, comprising:

a light source section;

an observation optical system that includes an objective lens, left and right zooming optical systems for changing the magnification of the observation optical system, and left and right eyepiece optical systems;

an illumination optical system that includes a reflecting member for leading the light flux from the light source section to an object, the reflecting member being inserted into and removed

from a space on the object side of the objective optical system in conjunction with a zooming operation of the left and right zooming optical systems.

3. (original) The stereoscopic microscope according to claim 2, wherein the reflecting member has two rounded notches for abutting peripheral portions of the light paths of the two observation light fluxes so as not to eclipse the light fluxes in these light paths.

4. (original) The stereoscopic microscope according to claim 3, wherein the two rounded notches each encompass 120 degrees or more of curvature and at least the outer edges of the two rounded notches abut peripheral portions of the light fluxes.

5. (canceled)

6. (currently amended) ~~The stereoscopic microscope according to claim 5;~~ A stereoscopic microscope, comprising:

a light source section;

an illumination optical system having an optical axis and including a projection optical system that forms a single image within the projection optical system, and which irradiates a light flux from the light source section onto an observation object via the projection optical system;

an observation optical system that includes an objective lens, left and right zooming optical systems for changing the magnification of the observation optical system, and left and right eyepiece optical systems;

wherein

a center position of said light source section is de-centered from the optical axis of the illumination optical system;

the illumination optical system includes a variable magnification optical system for changing the range of the illumination field in conjunction with a change in magnification of the observation optical system;

the illumination optical system has a reflecting member for leading the light flux from the light source section to the object and the reflecting member is positioned in the vicinity of an image of the light source section; and

the reflecting member is de-centered from the optical axis of the illumination optical system in a direction that is opposite to the direction that the center of the light source section is de-centered from the illumination optical system.

7. (canceled)

8. (currently amended) ~~The stereoscopic microscope according to claim 1,~~ A stereoscopic microscope, comprising:

a light source section;

an illumination optical system having an optical axis and including a projection optical system that forms a single image within the projection optical system, and which irradiates a light flux from the light source section onto an observation object via the projection optical system;

an observation optical system that includes an objective lens, left and right zooming optical systems for changing the magnification of the observation optical system, and left and right eyepiece optical systems;

wherein

a center position of said light source section is de-centered from the optical axis of the illumination optical system;

an optical member with a non-circular output end is arranged near an image formation surface of the illumination optical system,

the light source section includes a light guide, and

the shape of the output end of the light guide is substantially similar to the non-circular shape of the output end of the optical member.

9. (original) The stereoscopic microscope according to claim 3, wherein a reflection prevention

member is affixed to the area of the reflecting member having the two rounded notches.

10. (original) The stereoscopic microscope according to claim 9, wherein the reflection prevention member is a light shielding cloth.

11. (currently amended) ~~The stereoscopic microscope according to claim 1,~~ A stereoscopic microscope, comprising:

a light source section;

an illumination optical system having an optical axis and including a projection optical system that forms a single image within the projection optical system, and which irradiates a light flux from the light source section onto an observation object via the projection optical system;

an observation optical system that includes an objective lens, left and right zooming optical systems for changing the magnification of the observation optical system, and left and right eyepiece optical systems;

wherein

a center position of said light source section is de-centered from the optical axis of the illumination optical system; and

the illumination optical system has a reflecting member that leads the light flux from the light source section to an object, the reflecting member being inserted into and removed from a space on the object side of the objective lens in conjunction with a zooming operation of the observation optical system.

12. (original) The stereoscopic microscope according to claim 11, wherein the reflecting member has two rounded notches for abutting peripheral portions of the light paths of the two observation light fluxes so as not to eclipse the light fluxes in these light paths.

13. (original) The stereoscopic microscope according to claim 12, wherein the two rounded notches each encompass 120 degrees or more of curvature.

14. (original) The stereoscopic microscope according to claim 11, wherein the reflecting member is moved toward the object and toward the optical axis of the observation optical system when the observation magnification is changed from low magnification to high magnification.

15. (original) The stereoscopic microscope according to claim 13, wherein the observation magnification is within a range of 7 to 25.

16. (original) A stereoscopic microscope according to claim 2, wherein the reflecting member is moved toward the object and toward the optical axis of the observation optical system when the observation magnification is changed from low magnification to high magnification.

17. (original) The stereoscopic microscope according to claim 4, wherein the observation magnification is within a range of 7 to 25.

18. (original) The stereoscopic microscope according to claim 3, wherein the two rounded notches each encompass 120 degrees of curvature and continually abut peripheral portions of the light fluxes over 120 degrees of curvature at the maximum magnification of the observation optical system.

19. (new) A stereoscopic microscope, comprising:

a light source section;

an illumination optical system having an optical axis and including a projection optical system that forms a single image within the illumination optical system and which irradiates a light flux from the light source section onto an observation object;

an observation optical system that includes an objective lens, left and right zooming optical systems for changing the magnification of the observation optical system, and left and right eyepiece optical systems;

wherein

a center position of said light source section is de-centered from the optical axis of the illumination optical system such that the distance between the illumination light flux and the optical axis of the observation optical system is smaller when the light source section is de-centered from the optical axis of the illumination optical system than when the light source section is aligned on the optical axis of the illumination optical system.

20. (new) The stereoscopic microscope according to claim 19, wherein:

the illumination optical system includes a reflecting member for leading the light flux from the light source section to the object; and

the reflecting member is positioned in the vicinity of an image of the light source section.

21. (new) The stereoscopic microscope according to claim 19, wherein the illumination optical system includes a variable magnification optical system for changing the range of the illumination field in conjunction with a change in magnification of the observation optical system.

22. (new) The stereoscopic microscope according to claim 19, wherein the de-centering amount of the center of the light source section relative to the illumination optical system is changeable.